


A close-up photograph of dark, rich soil. A hand on the left holds a metal shovel filled with soil. A hand on the right holds a handful of soil. In the foreground, a white, irregular patch is visible on the soil surface, possibly representing a nutrient deficiency or a specific soil treatment area.

WE CHAMPION AUSTRALIAN
SOIL HEALTH
AND THE GROWERS WHO RELY ON IT.

Talk to the IPF Agronomists about optimising your soil or visit incitecpivotfertilisers.com.au



REALISING MAXIMUM SOIL POTENTIAL

Incitec Pivot Fertilisers has a long and proud heritage serving Australian agriculture with our people, products and services supporting soil health nationwide.

We are committed to supplying growers with the right fertilisers for optimum crop nutrition and growth.

Our team works closely with a network of local dealers based across the East Coast of Australia to support growers all year round. With our extensive network of dealers and agents, as well as our NATA-accredited Nutrient Advantage Laboratory, we can provide all the advice and tools to assist in realising maximum soil potential.





NUTRIENT ADVANTAGE

For more than 50 years, Nutrient Advantage has been helping growers achieve greater productivity through reliable soil, plant tissue, water, compost and grain testing, coupled with expert nutrient advice and decision support.



Healthy soil is at the very heart of sustainable farming operations. We assist agronomists and advisors to identify what the soil needs to optimise productivity.

NUTRIENT ADVANTAGE ENCOMPASSES:

- ✓ The Nutrient Advantage Laboratory – Australian owned and trusted, a state of the art laboratory accredited to the highest Australian and international standards.
- ✓ LabSTREAM – Mobile app for infield logging and geo-locating of samples.
- ✓ Nutrient Advantage Pro – Advisory software to assist with the interpretation of sample results and development of nutrient recommendations.
- ✓ Agronomy in Practice – A training service provided by Incitec Pivot Fertilisers to increase agronomy and product knowledge, enhance advisory skills of our customer network relating to fertiliser recommendations and providing participants with Fertcare® C accreditation.

WANT THE ADVANTAGE?

Visit [nutrientadvantage.com.au](https://www.nutrientadvantage.com.au) or call **1800 803 453** and ask about our soil and plant tissue testing services.

WHEN GROWERS TAKE CARE OF THEIR SOIL, IT TAKES CARE OF THEM WITH OPTIMUM CROP EFFICIENCY AND YIELD.





YOUR SOIL'S YOUR MOST VALUABLE ASSET, BUT DO YOU KNOW HOW HEALTHY IT IS?

THE ABILITY TO MEASURE AND MONITOR YOUR SOIL'S KEY BIOLOGICAL, CHEMICAL AND PHYSICAL CHARACTERISTICS IS ESSENTIAL TO UNDERSTANDING AND IMPROVING ITS HEALTH.

WE CONTINUALLY RESEARCH AND DEVELOP ADDITIONAL SOIL HEALTH TESTS TO ASSIST THE INDUSTRY TO MONITOR AND MANAGE SOIL HEALTH, AND **OUR NEW SOIL HEALTH PACKAGE DELIVERS FOUR KEY BENEFITS:**

- ✓ Farm resilience - Establish a baseline of soil health to develop long term farm resilience.
- ✓ Accurate results - Nutrient Advantage delivers scientifically verified and precise objective analysis.
- ✓ Supported decision making - Industry-leading agronomic advice, tailored specifically to your needs.
- ✓ Securing your future - Benchmark and improve the health of your soil for generations to come.

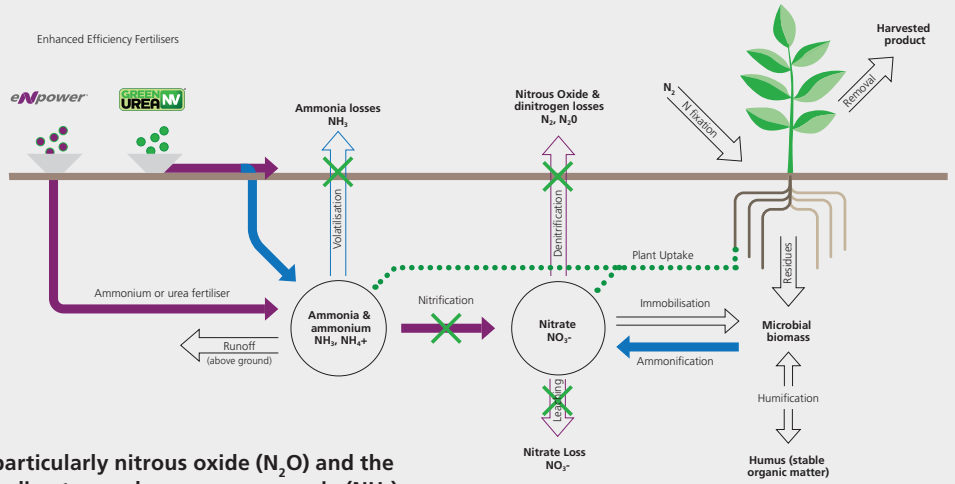
Tests can be ordered as a standalone package for \$80 using the Health1 code or added to any existing Nutrient Advantage test order for \$70.

To find out more about the test components or to order, visit soilhealthtesting.com.au or call **1800 803 453**.



ENHANCED EFFICIENCY FERTILISERS

Farmers today are under pressure to do more with less and be more environmentally conscious. Enhanced Efficiency Fertilisers "EEFs" present an opportunity for farmers to embrace proven technology to maximise yield potential whilst helping reduce environmental impact. EEFs help limit nitrogen losses, assisting your crops to use nitrogen more efficiently. There is potential for EEFs to help reduce greenhouse gas emissions from agriculture,



particularly nitrous oxide (N₂O) and the indirect greenhouse gas ammonia (NH₃).

Easily applied by IPF, they are a spray on coating for your Nitrogen based fertilisers such as Urea, MAP, DAP, Granulock® Z, GranAm®, Nitrophoska® & mixed with Easy N®. They can be easily incorporated into your fertiliser program.

Key
 X = Delayed with EEF coated Fertiliser.
 Activity timeframes vary based on a range of conditions. Speak to an IPF Agronomist to learn more.

ENPOWER

By reducing nitrogen losses, eNpower® can provide a more sustained nitrogen supply to the crop in line with crop needs, resulting in yield and quality improvements through reducing denitrification & leaching.

- ✓ Reduce gaseous nitrogen losses through denitrification by keeping nitrogen in the stable ammonium form. Potential reduction in nitrous oxide emissions up to 60%[^].
- ✓ Reduce leaching of nitrogen from the root zone by slowing the conversion of ammonium to nitrate in the soil.

- ✓ Extend the application interval between N fertilisers without reducing yields, which often eliminates an application pass.

Results from independent scientific research studying the cycling of nitrogen and loss pathways in cotton production systems have identified the potential for changing fertiliser management practices. "There is substantial scope to improve fNUE and reduce N losses without any impact on lint yield, by adjusting N fertiliser application rates, in particular in combination with the use of the nitrification inhibitor DMPP." (Scheer et al 2022).

Other recent irrigated cotton studies have indicated that the reduction in pre-plant N rates

in conjunction with nitrification inhibitors can assist greatly in reducing losses of greenhouse gas emissions (N₂O) from pre-plant fertiliser N for months by a range of 77-86pc across key QLD and NSW cotton regions (Schwenke et al 2018).

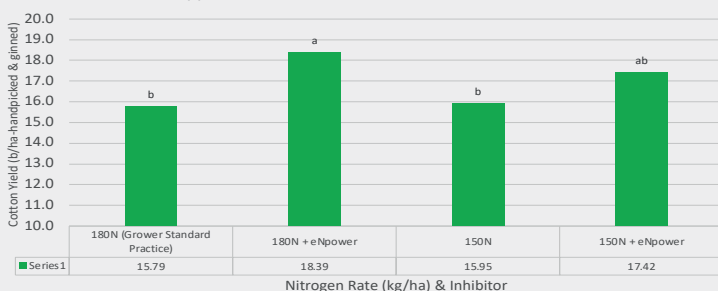
Preliminary trial results from an Incitec Pivot Fertilisers (unpublished) N rate and nitrification inhibitor (trademark eNpower-DMP) replicated trial conducted in the Upper Namoi Valley during the 2021/22 growing season are presented below. The N source used was BIG N® anhydrous ammonia (82-0-0) applied in May 2021 using host farmer equipment.

The site was responsive to applied nitrogen, with the 180N + eNpower treatment producing a significant (p<0.05: LSD=1.805b/ha) lint

yield response when compared to the two treatments: 180N (grower standard practice) and 150N. The difference between 180N + eNpower and 150N + eNpower is not statistically significant, despite additional yield being produced by the higher N rate. The 150N treatment has produced the highest yield of the untreated treatments (i.e. BIG N alone, without a nitrification inhibitor (eNpower-DMP)). eNpower treatments have delivered additional and significant higher lint yield increases at this site compared to the BIG N alone treatments where no nitrification inhibitor was used.

"Trials in dryland systems have reported lower denitrification losses, but under anaerobic conditions, nitrogen losses are still significant."

UPPER NAMOI-2021/22: COTTON YIELD[^] (BALES/HA)



GREEN UREA NV®

Volatilisation can cause significant nitrogen losses when urea is not incorporated by adequate rainfall, irrigation or cultivation soon after application. Green Urea NV slows the breakdown process to reduce these ammonia losses.

- ✓ Increase flexibility in urea applications.
- ✓ Reduce gaseous losses through volatilisation.
- ✓ Applied nitrogen is more efficiently used, you avoid paying for nitrogen that your crop can't use.

[^]Replicated trial data-Upper Namoi Valley, NSW: handpicked harvest data and hand ginned turnout data used to calculate yield presented.

References: 1. Incitec Pivot Fertilisers (2022). Unpublished.

2. Scheer, C., Rowlings, DW, Antille, DL, De Antoni Migliorati, M, Fuchs, K, Grace, PR, (2022) Improving nitrogen use efficiency in irrigated cotton production. Nutr Cycl Agroecosyst, <https://doi.org/10.1007/s10705-022-10204-6>

3. Schwenke, G. and McPherson, A. (2018) Mitigation of nitrous oxide emissions from furrow-irrigated Vertosols by 3,4-dimethyl pyrazole tetra-methylene sulfone, an alternative nitrification inhibitor to nitrapyrin for direct injection with anhydrous ammonia. Soil Research 56(7) 752-763. <https://doi.org/10.1017/SR18114>

**GRANULOCK Z
DELIVERS ZINC TO
EVERY PLANT**
AS WELL AS A PRECISE
MIX OF THE OTHER
ELEMENTS IT NEEDS.

WHERE TO USE GRANULOCK Z

Granulock Z is particularly valuable for crop establishment in the following situations:

- ✓ On alkaline or calcareous soils.
- ✓ When soils are wet and cold.
- ✓ Where there is a reduced population of arbuscular mycorrhizae fungi (AMF) in the soil.
- ✓ Where sulphonylurea herbicides are used.
- ✓ On soils with a low total zinc status.

Application: Granulock Z is best applied in a band with, or close to, seed at planting, where new roots can easily access the nutrients.

WHY GRANULOCK?

- ✓ Strong start for newly sown crops.
- ✓ Precise delivery of nutrients in every granule.
- ✓ Zinc in maintenance levels supplied evenly to plants.
- ✓ Two forms of sulphur for immediate and season-long uptake.
- ✓ Flexibility to blend for soil-specific precision.
- ✓ High quality and consistency.

**Granulock® Z
IS A COMPOUND
FERTILISER WITH
PRECISE NUTRITION
IN EVERY GRANULE.**

BEING HIGHLY COMPATIBLE WITH ALL OTHER IPF FERTILISER INGREDIENTS, FARMERS CAN NOW INCLUDE A SOIL AMELIORANT WITH FAST ACTING ORGANIC COMPOUNDS IN THEIR IPF CUSTOM OR RANGE BLEND.

HUMIC ACIDS HAVE THE POTENTIAL TO:

- ✓ Increase fertiliser efficiency. Being co-located with applied fertiliser, the humic acid can impart its benefits directly into the root zone and where the fertiliser is applied.
- ✓ Improve soil health and quality. The high organic carbon content and high CEC of the product can benefit soil health.
- ✓ Increased nutrient availability leading to higher yields and quality.
- ✓ Mitigate stress. Trigger[®] may help mitigate the effects of abiotic and biotic crop stresses.

Application Rates: Trigger can be applied at a rate of 10 to 40 kg per hectare broadcast, or 6 to 20 kg per hectare in furrow.

WHY TRIGGER?

- ✓ An easy addition to your current IPF fertiliser blends and straights.
- ✓ Uniquely air dried product means heat sensitive functional groups remain present in the granules (carboxyl, phenolic, amine and other).
- ✓ Extremely low dust, extremely uniform 2.4 - 2.6mm granules. Air seeder rated.
- ✓ Broad blend compatibility and ability to blend with your existing IPF fertilisers.

Product safety: When organic carbon compound products are blended with any products containing Ammonium Nitrate (AN), such as Nitrophoska[®] or Cal-Am[®] blends, such blends are classified as DG-Class 9, UN2071. These blends are subject to certain restrictions on airfreighting and shipping, as well as bulk storage. UN2071 blends may be capable of Self-Sustaining Decomposition. The users must read, understand and adhere to the "Nitrate Blends (Hazardous)" Safety Data Sheet.

Trigger contains 70% humic acid by colorimetric humic acid test; 35% humic acid by gravimetric humic acid testing.



CUSTOM **BLENDS**

INCITEC PIVOT FERTILISERS OFFERS MORE THAN 900 STANDARD BLENDS, WITH A FURTHER 3,600 CUSTOM BLENDS GENERATED ON REQUEST FROM ACCREDITED ADVISERS OR FROM IPF DISTRIBUTORS.

This range of blends allows for almost any crop nutritional requirement to be met, with new custom blends continually being created to match nutritional needs of crops and avoid the under or over application of nutrients.

IPF's comprehensive range of fertiliser blends allows farmers to match the nutrients in the fertiliser to their crop requirements to maximise the value of their fertiliser investment.

Blends are available in a wide number of straight fertiliser combinations, however guidelines do exist as to which ingredients can or cannot be blended together based on their physical and chemical compatibilities and also agronomic considerations. For more information speak to your trusted agronomist or IPF dealer.



EASY N's concentrated liquid form allows precise, flexible application via whatever method suits your operation - and to suit all kinds of conditions. And its combination of three different forms of nitrogen with different response profiles means your crop will get the nitrogen it needs, when it needs it, with less N loss to volatilisation. Add to that EASY N's many time and labour-saving advantages, and you have one very versatile and cost-efficient alternative to conventional urea.

WHY CHOOSE EASY N?

EFFICIENT, STAGED NUTRIENT DELIVERY

- ✓ EASY N's three forms of nitrogen deliver both quick and staged response for optimum plant availability.
- ✓ It's powerful in wet or dry conditions, providing quick root uptake with rain, plus foliar uptake even in dry conditions.
- ✓ It's less volatile than urea, so there's less risk of N loss if uptake isn't immediate or you don't get follow-up rain.

FLEXIBILITY IN APPLICATION

EASY N can be fertigated via irrigation equipment, applied using boom-sprays, injected into the soil, dribble banded, foliar sprayed or water-run in row crops. It's ideal for split or 'little and often' applications to closely match the crop's N requirements. And you can apply it in any season, wet or dry.

PRECISION AG MADE EASY

EASY N can be metered precisely for easier and more accurate variable rate applications and leaves broadcast Urea granules in the dust. EASY N boom sprayed can maintain even distribution of N even in windy or showery conditions, and provides better accuracy at lower application rates.

FAST AND EFFICIENT ALL AROUND

One-pass application makes EASY N a significant time and labour saver. Higher N concentration means faster, fewer tank refills too. Plus no bag handling, no dust, no waiting for products to dissolve and no manual lifting, augers or forklifts - let your pumps do all the heavy work.

CONVENIENT STORAGE AND HANDLING

Delivered by IPF direct to your farm, it's stored in cost-effective heavy-duty tanks, ready to go any time. And it stores long-term - so if you don't use it one year, it's waiting for you the next. Getting set up is easy too. Most growers can use existing boom spray equipment, with only minor modification.



EASY N LETS YOU
CHOOSE WHEN, WHERE
AND HOW TO APPLY
NITROGEN FOR OPTIMUM
EFFICIENCY, PLANT
NUTRITION AND FARM
PRODUCTIVITY.
GO EASY.

Visit incitecpivotfertilisers.com.au
or call **1800 009 832** to find your
nearest EASY N supplier.